

REMARKS

In response to the Office Action dated March 7, 2007 and the Request for Continued Examination filed herewith, please enter the foregoing amendments.

Support for the amendments may be found generally throughout the specification, and in particular, at paragraph [0033] of the published application. The new claims are patentable at least for the reasons set forth above.

In the claimed device, cleaning is accomplished by feeding a cleaning gas into the plasma generating space in which activated species are generated. See paragraph [0032] of the published application. The plasma generating space corresponds to the first sub-space of claims 15 and 18. However, the present invention is not limited to the disclosed embodiments.

The generated active species of the cleaning gas are fed through the first plurality of through-holes into the second sub-space. During this process, the member (for separating the first sub-space from the second sub-space) is heated so that the adsorption of the cleaning gas onto the inner circumferential faces of the first through-hole is suppressed. Because the present invention includes a heater for heating the member so that the adsorption of a cleaning gas onto the inner circumferential face of the first through-hole is suppressed, it is possible to create the separating member with a large number of through-holes. In such a situation, there is a significant amount of member material that is exposed to the cleaning gas during the cleaning process. For example, in the reference JP 11-157692, there are 500 through holes, each having a diameter of 0.5 mm and a length of 3 mm.

The Examiner relies upon USP 6,436,193, *Kasai*, for an alleged teaching of heating the showerhead. *Kasai* teaches that the temperature of the showerhead is

controlled so that the temperature is lower than the reaction temperature and higher than the liquefying temperature of the components of the CVD reaction gas. See column 10, lines 12 – 18. In examples 1 and 3, *Kasai* states that the inner temperature of the processing chamber is 27C and 30C, respectively. Those values are well below the 100C + that is set forth in at least some of the foregoing claims.

Furthermore, with regard to claim 18, the separating member is made from an electrically conductive material. In order to suppress contamination of the member, as described above, the member should be uniformly heated so that the entire member is above the suppression temperature. Otherwise, there will likely be contamination. Since claim 18 defines the member as being made of electrically conductive material, it is inherently made from a material that is also a good thermal conductor. Thus, uniform heating of the member can be easily accomplished.

In view of the foregoing amendments and the remarks that follow, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections.

Respectfully submitted,

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Date: September 7, 2007

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